



Fact Sheet

South Carolina Department of Health and Environmental Control • www.scdhec.gov

Jellyfish

<p>What are jellyfish?</p>	<p>Jellyfish describes a number of marine animals capable of inflicting a painful, and occasionally life-threatening, sting. These include fire coral, jellyfishes (including "sea wasps") and anemones. The stings occur when a person comes into contact with the creature's tentacles or other appendages, which may carry millions of small stinging cells, nematocysts, each equipped with venom and a microscopic stinger. Broken-off tentacles that are fragmented in the surf or washed up on the beach can retain their toxicity for months and should not be handled, even if they appear to be dried out and withered.</p> <p>Stings usually paralyze or kill only small creatures, but some jellyfish are harmful to humans. Jellyfish do not "attack" humans. Stings occur when swimmers or beachcombers come in contact with nematocysts. Severity of stings depends on the species of jellyfish, the penetrating power of the nematocyst, the thickness of exposed skin of the victim and the sensitivity of the victim to the venom. The majority of stings from jellyfish occur in tropical and warm temperate waters. Most species off the southeastern coast are capable of inflicting only mild stings resulting in minor discomfort.</p> <p>Jellyfish occur in a wide variety of sizes, shapes and colors. Most are semi-transparent or glassy and bell-shaped, measuring less than an inch to over a foot across the bell, although some may reach 7 feet. The tentacles of some jellyfish can reach lengths greater than 100 feet. Regardless of their size or shape, most jellyfish are very fragile, often containing less than 5% solid organic matter.</p> <p>Jellyfish inhabit every major ocean. Most live in shallow coastal waters. The adult jellyfish drifts in the water with limited control over its movements.</p>
<p>What types of jellyfish are found in South Carolina?</p>	<p>Although most jellyfish that inhabit South Carolina waters are harmless to humans, there are a few that require caution. The most common jellyfish found in South Carolina are:</p> <p style="text-align: center;"><i>Cannonball Jelly</i></p> <p>Also known as jellyballs, these jellyfish are the most common in our area. During the summer and fall, large numbers appear near the coast and in the mouths of estuaries. Fortunately, while the cannonball is the most abundant jellyfish in the area, it is also one of the least venomous. Cannonballs can be identified by their white bell shape decorated with rich, chocolate brown bands. They have no tentacles but a gristle-like feeding apparatus formed by the joining of the oral arms.</p> <p style="text-align: center;"><i>Mushroom Jelly</i></p> <p>The mushroom jelly is often mistaken for the cannonball jelly, but it differs in many ways. The larger mushroom jelly, growing to 20 inches in diameter, lacks the brown bands associated with the cannonball and is much flatter and softer. Like the cannonball, the mushroom has no tentacles, however, it possesses long finger-like appendages hanging from the feeding apparatus. The mushroom jelly does not represent a hazard to humans.</p> <p style="text-align: center;"><i>Moon Jelly</i></p> <p>Probably the most widely recognized jellyfish, the moon jelly is relatively infrequent in South Carolina waters. It has a transparent, saucer-shaped bell and is easily identified by</p>

the four pink horseshoe-shaped gonads visible through the bell. It typically reaches 6-8 inches in diameter, but some are known to exceed 20 inches. The moon jelly is only slightly venomous. Contact can produce symptoms from immediate prickly sensations to mild burning. Pain is usually restricted to immediate area of contact.

Lion's Mane

Also known as the winter jelly, the lion's mane typically appears during colder months of the year. The bell, measuring 6-8 inches, is saucer-shaped with reddish brown oral arms and eight clusters of tentacles hanging underneath. Lions Manes are generally considered moderate stingers. Symptoms are similar to those of the moon jelly, however, usually more intense. Pain is relatively mild and often described as burning rather than stinging.

Sea Nettle

The sea nettle is frequently observed in South Carolina waters during summer months. This jellyfish is saucer-shaped with brown or red pigments, usually 6-8 inches in diameter. Four oral arms and long marginal tentacles hang from the bell. Considered moderate to severe, symptoms from sea nettle stings are similar to those of the lion's mane.

Sea Wasp

Known as the box jelly because of its cube-shaped bell, the sea wasp is the most venomous jellyfish inhabiting our waters. Their potent sting can cause severe dermatitis and may even require hospitalization. Sea wasps are strong, graceful swimmers reaching 5-6 inches in diameter and 4-6 inches in height. Several long tentacles hang from the four corners of the cube. A similar species, the four-tentacled *Tamoya haplonema*, also occurs in our waters.

Portuguese Man-of-War

Although the Portuguese man-of-war is not a "true" jellyfish. These animals consist of a complex colony of individual members, including a float, modified feeding polyps and reproductive medusae. They typically inhabit the warm waters of the tropics, sub-tropics and Gulf Stream. Propelled by wind and ocean currents, they sometimes drift into nearshore waters of South Carolina. Though they infrequently visit our coast, swimmers should learn to identify these highly venomous creatures. The gas-filled float of the man-of-war is purple-blue and can reach lengths of 12 inches. Under the float, tentacles equipped with thousands of nematocysts hang from the feeding polyps extending up to 65 feet. The man-of-war can inflict extremely painful stings. Symptoms include severe shooting pain described as a shocklike sensation, and intense joint and muscle pain. Pain may be accompanied by headaches, shock, collapse, faintness, hysteria, chills, fever, nausea and vomiting. Initial contact with Portuguese Man'O Wars may result in only a small number of stings. However, efforts to escape from the tentacles may further discharge nematocysts and intensify stings. Care should be taken when removing the adhering tentacles. Severe stings can occur even when the animal is beached or dead.

What are the symptoms?	Stings can range in severity from mild burning and skin redness to excruciating pain and severe blistering with generalized illness (nausea, vomiting, shortness of breath, muscle spasm and low blood pressure).
How are jellyfish stings treated?	<p>If stung by a jellyfish, the victim should carefully remove the tentacles that adhere to the skin by using sand, clothing, towels, seaweed or other available materials. As long as tentacles remain on the skin, they will continue to discharge venom.</p> <p>Rinse the affected area with salt water. Do not rinse with fresh water, since freshwater will further activate nematocysts and worsen the reaction. Immobilize the area that was poisoned to prevent further spread. For example, if a foot was stung, encourage the victim to keep the area still with as little movement as possible.</p> <p>A variety of substances have been used to reduce the effects of jellyfish stings. Meat tenderizer, sugar, vinegar, plant juices and sodium bicarbonate have all been used with varying degrees of success. A paste made from unseasoned meat tenderizer may be helpful, but do not exceed 15 minutes' application time, particularly upon the sensitive skin of small children. Any form of alcohol should not be used as they could actually stimulate the stinging cells. Human urine also cause a discharge of nematocysts and should not be used.</p> <p>Victims of serious stings should make every effort to get out of the water as soon as possible to avoid drowning. If swelling and pain from more serious stings persists, prompt medical attention should be sought. Recovery periods can vary from several minutes to several weeks.</p> <p>Be prepared to treat an allergic reaction following a jellyfish sting. If possible, carry an oral antihistamine, and an allergy kit if needed. If the victim has a large area involved, is very young or very old, or shows signs of generalized illness (nausea, vomiting, weakness, shortness of breath or chest pain), seek help from a doctor.</p> <p>Apply a thin coating of hydrocortisone lotion (0.5 to 1 percent) twice a day. Anesthetic ointment (such as lidocaine hydrochloride 2.5 percent or a benzocaine-containing spray) may provide short-term pain relief. Use over-the-counter pain medications such as acetaminophen (Tylenol) or ibuprofen (Advil, Motrin) may also help to control pain symptoms.</p>
<i>What can be done to prevent jellyfish stings?</i>	Be careful when investigating jellyfish that have washed ashore. Although they may be dead, they may still be capable of inflicting stings. Remember to take precautions when removing tentacles after contact or additional stings may result.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Region 7

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